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210680



SUPERFUND TECHNICAL ASSESSMENT AND RESPONSE TEAM
EPA CONTRACT 68-W5-0019

START-02-F-01231

TRANSMITTAL MEMO

To: Eric Wilson, OSC
Removal Action Branch, U.S. EPA Region II

From: Adly A. Michael, Data Reviewer
START Region II

Subject: Cornell-Dubilier Electronics Site
Data Validation Assessment

Date: August 04, 1997

The purpose of this memo is to transmit the following information:

- Data validation results for the following parameters:

| | |
|--------------------------------|-------------------|
| Cadmium & Lead | 23 samples |
| Matrices and Number of Samples | |
| Soil | 23 samples |
| Sampling date: | June 26-27, 1997. |

The final data assessment narrative and original analytical data package are attached.

cc: START PM Michael Mahnkopf
START FILE TDD #:02-97-02-0015B
TDD #:02-97-06-0017
PCS #:1970

NARRATIVE

CASE No. 1970

SITE NAME: Cornell-Dubilier Electronics Site

Laboratory Name: Industrial Corrosion Management (ICM)

INTRODUCTION:

The laboratory's portion of this Case consisted of 23 samples collected on 6/26-27/95. The laboratory reported No problem(s) with the receipt of these samples.

The laboratory reported No problems with the analyses of the samples.

The evaluator has commented on the criteria specified under each fraction heading. All criteria have been assessed, but no discussion is given where the evaluator has determined that criteria were adequately performed or require no comment. Details relevant to these comments are given on the following forms.

A:\QAQCASBE.TOS

IV. Inorganic:

| | |
|-----------|--|
| <u>Y</u> | Data Summary/Tablulated Results |
| <u>Y</u> | Initial and Continuing Calibration |
| <u>Y</u> | Blanks |
| <u>Y</u> | ICP Interference Check |
| <u>Y</u> | Spike Sample Recovery |
| <u>Y</u> | Duplicates |
| <u>Y</u> | Detection Limits |
| <u>NA</u> | Standard Addition Results |
| <u>Y</u> | ICP Serial Dilutions |
| <u>Y</u> | ICP Linear Ranges |
| <u>Y</u> | ICP Interelement Correction Factors |
| <u>Y</u> | Holding Times |
| <u>Y</u> | Chain of Custody |
| <u>Y</u> | Raw Data |
| <u>Y</u> | Quantitation, Conversions, Dilutions, etc. |

Comments:

1. Refer to Tabulated Results.

STANDARD OPERATING PROCEDURE

Page 1 of 3

Title: Evaluation of Inorganic Data for the
Contract laboratory Program
Appendix A.2: Data Assessment Narrative

Date: Jan. 1992
Number: HW-2
Revision: 11

Case #: RFP # 1970

Site: Cornell-Dubilier Electronics Site

SDG#: CDE01

Lab: Industrial Corrosion Management, Inc.

Matrix:
Soil: 23

Contractor: WESTON-START

Reviewer: Adly A. Michael

A.2.1 Validation Flags-

The following flags have been applied in red by the data validator and must be considered by the data user.

J-

This flag indicates the result qualified as estimated.

Red- Line-

A red-line drawn through a sample result indicates an unusable value. The red-lined data are known to contain significant errors based on documented information and must not be used by the data user.

Fully Usable Data-

The results that do not carry "J" or "red-line" are fully usable.

Contractual Qualifiers-

The legend of contractual qualifiers applied by the laboratory on Form I's is found on page B-20 of SOW ILM01.0.

A.2.2 The data assessment is given below and on the attached sheets.

On 26-27 June 1997, USEPA Region II sampling personnel collected twenty three (23) surface soil samples from the Cornell-Dubilier Electronics Site, South Plainfield, New Jersey. Within twenty-four hours of collection, samples were picked up by Industrial Corrosion Management, Inc (ICM) lab personnel from the Region II START office, located in Edison, New Jersey. The laboratory verified that samples were received intact, properly preserved and in sealed shipping containers. Samples were analyzed by the laboratory for Cadmium & Lead metals.

The soil samples were analyzed for cadmium & lead metals following the Contract Laboratory Program (CLP) Statement of Work (SOW) number ILM04.0.

STANDARD OPERATING PROCEDURE

Page 2 of 3

Title: Evaluation of Inorganic Data for the
Contract Laboratory Program
Appendix A.2: Data Assessment Narrative

Date: Jan. 1992
Number: HW-2
Revision: 11

Client identification (ID) and laboratory ID numbers are as follows:

| <u>Client ID No.</u> | <u>Laboratory ID No.</u> | <u>MATRIX</u> |
|----------------------|--------------------------|---------------|
| CDE-001 | 266311 | SOIL |
| CDE-002 | 266312 | SOIL |
| CDE-003 | 266313 | SOIL |
| CDE-004 | 266314 | SOIL |
| CDE-005 | 266315 | SOIL |
| CDE-006 | 266316 | SOIL |
| CDE-007 | 266317 | SOIL |
| CDE-008 | 266318 | SOIL |
| CDE-009 | 266319 | SOIL |
| CDE-010 | 266320 | SOIL |
| CDE-011 | 266321 | SOIL |
| CDE-012 | 266322 | SOIL |
| CDE-013 | 266323 | SOIL |
| CDE-014 | 266324 | SOIL |
| CDE-015 | 266325 | SOIL |
| CDE-016 | 266326 | SOIL |
| CDE-017 | 266327 | SOIL |
| CDE-018 | 266328 | SOIL |
| CDE-019 | 266329 | SOIL |
| CDE-020 | 266330 | SOIL |
| CDE-021 | 266331 | SOIL |

- 1) Sample # CDE-002 is a field duplicate of sample # CDE-001.

The results presented in the data package are acceptable.

STANDARD OPERATING PROCEDURE

Page 3 of 3

Title: Evaluation of Inorganic Data for the
Contract Laboratory Program
Appendix A.2: Data Assessment Narrative

Date: Jan. 1992
Number: HW-2
Revision: 11

A.2.3 Contract Problem/Non-Compliance:

MMB/ESAT Reviewer:

Signature

Date:

Contractor Reviewer:

Signature

Date:

Verified by:

Signature

Date:

OTHER ANALYTES WORK TABLE

Project: Cornell-Dublier Electronics

START PM: Michael Mahnkopf

Sampling Date: 26-27 June 1997

SAMPLE #/CONCENTRATION (mg/Kg)

| Total Metals | Percent Solid | Cadmium 1.23 | Lead 0.70 | |
|------------------------|---------------|-----------------|--------------|--|
| Target Analyte | | | | |
| Method Detection Limit | | | | |
| Sample ID | | | | |
| CDE-001 | 81.7 | 0.83 B | 182 | |
| CDE-002 | 81.2 | 0.72 B | 178 | |
| CDE-003 | 90.8 | 0.30 B | 117 | |
| CDE-004 | 80.6 | 0.15 U | 31.0 | |
| CDE-005 | 88.7 | 0.44 B | 105 | |
| CDE-006 | 89.9 | 0.13 U | 78.0 | |
| CDE-007 | 86.7 | 0.14 U | 73.4 | |
| CDE-008 | 85.6 | 0.14 U | 56.5 | |
| CDE-009 | 87.9 | 0.47 B | 69.6 | |
| CDE-010 | 94.1 | 0.13 U | 50.3 | |
| CDE-011 | 85.6 | 0.27 B | 117 | |
| CDE-012 | 92.5 | 0.63 B | 183 | |
| CDE-013 | 87.1 | 1.4 | 247 | |
| CDE-014 | 79.6 | 2.3 | 291 | |
| CDE-015 | 91.0 | 1.8 | 221 | |
| CDE-016 | 90.9 | 0.26 B | 40.7 | |
| CDE-017 | 95.2 | 0.12 U | 68.9 | |
| CDE-018 | 92.1 | 0.13 U | 78.2 | |
| CDE-019 | 95.1 | 0.13 U | 12.3 | |
| CDE-020 | 87.4 | 0.14 U | 55.6 | |
| CDE-021 | 91.1 | 0.81 B | 126 | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

Inorganic Qualifiers

U - non-detected compound

J - estimated value

B - between the instrument detection limit (IDL)
and the method detection limit (MDL)

R - rejected compound

U.S. EPA - CLP

6
FIELD DUPLICATES

EPA SAMPLE NO.

CDE01/CDE02

Lab Name: ICM Labs

Contract: _____

Lab Code: ICM

Case No.: _____

SAS No.: _____

SDG No.: CDE01Matrix (soil/water): SoilLevel (low/med): Low% Solids Sample: 81.7% Solids Duplicate: 81.2Concentration Units (ug/L or mg/kg dry weight): mg/Kg

| Analyte | Action Limit | Sample (S) | C | Field Duplicate (D) | C | RPD | DIFF | Q | M |
|-----------|--------------|------------|---|---------------------|---|------|------|---|----|
| Aluminum | | | | | | | | | P |
| Antimony | | | | | | | | | P |
| Arsenic | | | | | | | | | F |
| Barium | | | | | | | | | P |
| Beryllium | | | | | | | | | P |
| Cadmium | 1.224 ppm | 0.8300 B | | 0.7300 B | | 0.11 | | | P |
| Calcium | | | | | | | | | P |
| Chromium | | | | | | | | | P |
| Cobalt | | | | | | | | | P |
| Copper | | | | | | | | | F |
| Iron | | | | | | | | | P |
| Lead | 100% RPD | 182 | | 178 | | 2.2 | | | P |
| Magnesium | | | | | | | | | P |
| Manganese | | | | | | | | | P |
| Mercury | | | | | | | | | CV |
| Nickel | | | | | | | | | P |
| Potassium | | | | | | | | | P |
| Selenium | | | | | | | | | F |
| Silver | | | | | | | | | P |
| Sodium | | | | | | | | | P |
| Thallium | | | | | | | | | F |
| Vanadium | | | | | | | | | P |
| Zinc | | | | | | | | | P |
| Cyanide | | | | | | | | | NR |

FORM VI - IN

METHODOLOGY SUMMARY

SOILS:

METALS ANALYSES

Reference - USEPA CLP SOW for Inorganic Analysis, Multi-Media, Multi-Concentration, ILMO4.0.

1 g of sample is digested in acid. The digestate is then refluxed with acid. After cooling, the digestate is filtered and then diluted to 100 ml. It is then analyzed by ICP or Furnace.

The flameless AA procedure is a physical method based on the absorption of radiation at 253.7 nm by mercury vapor. Organic mercury compounds are oxidized and the mercury is reduced to the elemental state and aerated from solution in a closed system. The mercury vapor passes through a cell positioned in the light path of an atomic absorption spectrophotometer. Absorbance is measured as a function of mercury concentration.

TOTAL CYANIDE ANALYSES

Reference - USEPA CLP SOW for Inorganic Analysis, Multi-Media, Multi-Concentration, ILMO4.0.

The cyanide as hydrocyanic acid (HCN) is released from cyanide complexes by means of a reflux-distillation operation and absorbed in a scrubber containing sodium hydroxide solution. In the colorimetric measurement the cyanide is converted to cyanogen chloride, CNCl, by reaction with chloramine-T at pH less than 8 without hydrolyzing to cyanate. After the reaction is complete, color is formed on the addition of pyridine-barbituric acid. The absorbance is read at 578 nm.

INDUSTRIAL CORROSION MANAGEMENT, INC.
1152 Route 10
Randolph, New Jersey 07869
201-584-0330

SDG # CDE01

Sample link: 266311- 266331

NONCONFORMANCE SUMMARY

All external chains of custody are copies, the originals are filed in the organic portion of this data package. The internal chain of custody is a copy, the original is filed in the organic portion of this data package.

No problems were encountered with the analysis of these samples.

COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Lab Name: ICM_LABS _____

Contract: _____

Lab Code: ICM _____

Case No.: _____

SAS No.: _____

SDG No.: CDE01_

SOW No.: ILM04.0

| EPA Sample No. | Lab Sample ID |
|----------------|---------------|
| CDE01 | 266311 |
| CDE02 | 266312 |
| CDE03 | 266313 |
| CDE04 | 266314 |
| CDE04D | 266314D |
| CDE04S | 266314S |
| CDE05 | 266315 |
| CDE05D | 266315D |
| CDE05S | 266315S |
| CDE06 | 266316 |
| CDE07 | 266317 |
| CDE08 | 266318 |
| CDE09 | 266319 |
| CDE10 | 266320 |
| CDE11 | 266321 |
| CDE12 | 266322 |
| CDE13 | 266323 |
| CDE14 | 266324 |
| CDE15 | 266325 |
| CDE16 | 266326 |

Were ICP interelement corrections applied ?

Yes/No YES

Were ICP background corrections applied ?

Yes/No YES

If yes - were raw data generated before
application of background corrections ?

Yes/No NO

Comments:

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: Richard S. Levine (me) Name: Richard S. Levine _____Date: 7/23/97 Title: Laboratory Manager _____

U.S. EPA - CLP

COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Lab Name : ICM LABS Contract :

Lab Code: ICM Case No.: _____ SAS No.: _____ SDG No.: CDE01_____

SOW NO.: ILM04.0

Were ICP interelement corrections applied? Yes/No YES

Were ICP background corrections applied? Yes/No YES

If yes - were raw data generated before application of background corrections ? Yes/No NO

Comments:

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: Richard S. Levine (mc) Name: Richard S. Levine

Date: 7/23/91 Title: Laboratory Manager

INORGANIC ANALYSES DATA SHEET

CDE01

Lab Name: ICM_LABS _____

Contract: _____

Lab Code: ICM _____

Case No.: _____

SAS No.: _____

SDG No.: CDE01 _____

Matrix (soil/water): SOIL _____

Lab Sample ID: 266311

Level (low/med): LOW _____

Date Received: 06/27/97

% Solids: 81.7

Concentration Units (ug/L or mg/kg dry weight): MG/KG

| CAS No. | Analyte | Concentration | C | Q | M |
|-----------|-----------|---------------|---|---|----|
| 7429-90-5 | Aluminum | | | | NR |
| 7440-36-0 | Antimony | | | | NR |
| 7440-38-2 | Arsenic | | | | NR |
| 7440-39-3 | Barium | | | | NR |
| 7440-41-7 | Beryllium | | | | NR |
| 7440-43-9 | Cadmium | 0.83 | B | | P |
| 7440-70-2 | Calcium | | | | NR |
| 7440-47-3 | Chromium | | | | NR |
| 7440-48-4 | Cobalt | | | | NR |
| 7440-50-8 | Copper | | | | NR |
| 7439-89-6 | Iron | | | | NR |
| 7439-92-1 | Lead | 182 | | | P |
| 7439-95-4 | Magnesium | | | | NR |
| 7439-96-5 | Manganese | | | | NR |
| 7439-97-6 | Mercury | | | | NR |
| 7440-02-0 | Nickel | | | | NR |
| 7440-09-7 | Potassium | | | | NR |
| 7782-49-2 | Selenium | | | | NR |
| 7440-22-4 | Silver | | | | NR |
| 7440-23-5 | Sodium | | | | NR |
| 7440-28-0 | Thallium | | | | NR |
| 7440-62-2 | Vanadium | | | | NR |
| 7440-66-6 | Zinc | | | | NR |
| | Cyanide | | | | NR |

Color Before: BROWN _____

Clarity Before: OPAQUE

Texture: MED _____

Color After: YELLOW _____

Clarity After: CLEAR _____

Artifacts: _____

Comments:

INORGANIC ANALYSES DATA SHEET

CDE02

Lab Name: ICM LABS

Contract: _____

Lab Code: ICM

Case No.: _____

SAS No.: _____

SDG No.: CDE01

Matrix (soil/water): SOIL

Lab Sample ID: 266312

Level (low/med): LOW

Date Received: 06/27/97

% Solids: 81.2

Concentration Units (ug/L or mg/kg dry weight): MG/KG

| CAS No. | Analyte | Concentration | C | Q | M |
|-----------|-----------|---------------|---|---|----|
| 7429-90-5 | Aluminum | | | | NR |
| 7440-36-0 | Antimony | | | | NR |
| 7440-38-2 | Arsenic | | | | NR |
| 7440-39-3 | Barium | | | | NR |
| 7440-41-7 | Beryllium | | | | NR |
| 7440-43-9 | Cadmium | 0.72 | B | | P |
| 7440-70-2 | Calcium | | | | NR |
| 7440-47-3 | Chromium | | | | NR |
| 7440-48-4 | Cobalt | | | | NR |
| 7440-50-8 | Copper | | | | NR |
| 7439-89-6 | Iron | | | | NR |
| 7439-92-1 | Lead | 178 | | | P |
| 7439-95-4 | Magnesium | | | | NR |
| 7439-96-5 | Manganese | | | | NR |
| 7439-97-6 | Mercury | | | | NR |
| 7440-02-0 | Nickel | | | | NR |
| 7440-09-7 | Potassium | | | | NR |
| 7782-49-2 | Selenium | | | | NR |
| 7440-22-4 | Silver | | | | NR |
| 7440-23-5 | Sodium | | | | NR |
| 7440-28-0 | Thallium | | | | NR |
| 7440-62-2 | Vanadium | | | | NR |
| 7440-66-6 | Zinc | | | | NR |
| | Cyanide | | | | NR |

Color Before: BROWN

Clarity Before: OPAQUE

Texture: MED

Color After: YELLOW

Clarity After: CLEAR

Artifacts: _____

Comments:

INORGANIC ANALYSES DATA SHEET

CDE03

Lab Name: ICM LABS _____

Contract: _____

Lab Code: ICM _____ Case No.: _____ SAS No.: _____ SDG No.: CDE01 _____

Matrix (soil/water): SOIL _____ Lab Sample ID: 266313

Level (low/med): LOW _____ Date Received: 06/27/97

% Solids: 90.8

Concentration Units (ug/L or mg/kg dry weight): MG/KG

| CAS No. | Analyte | Concentration | C | Q | M |
|-----------|-----------|---------------|---|---|----|
| 7429-90-5 | Aluminum | | | | NR |
| 7440-36-0 | Antimony | | | | NR |
| 7440-38-2 | Arsenic | | | | NR |
| 7440-39-3 | Barium | | | | NR |
| 7440-41-7 | Beryllium | | | | NR |
| 7440-43-9 | Cadmium | 0.30 | B | | P |
| 7440-70-2 | Calcium | | | | NR |
| 7440-47-3 | Chromium | | | | NR |
| 7440-48-4 | Cobalt | | | | NR |
| 7440-50-8 | Copper | | | | NR |
| 7439-89-6 | Iron | | | | NR |
| 7439-92-1 | Lead | 117 | | | P |
| 7439-95-4 | Magnesium | | | | NR |
| 7439-96-5 | Manganese | | | | NR |
| 7439-97-6 | Mercury | | | | NR |
| 7440-02-0 | Nickel | | | | NR |
| 7440-09-7 | Potassium | | | | NR |
| 7782-49-2 | Selenium | | | | NR |
| 7440-22-4 | Silver | | | | NR |
| 7440-23-5 | Sodium | | | | NR |
| 7440-28-0 | Thallium | | | | NR |
| 7440-62-2 | Vanadium | | | | NR |
| 7440-66-6 | Zinc | | | | NR |
| | Cyanide | | | | NR |

Color Before: BROWN _____ Clarity Before: OPAQUE Texture: MED _____

Color After: YELLOW _____ Clarity After: CLEAR Artifacts: _____

Comments:

INORGANIC ANALYSES DATA SHEET

CDE04

Lab Name: ICM_LABS _____

Contract: _____

Lab Code: ICM _____

Case No.: _____

SAS No.: _____

SDG No.: CDE01

Matrix (soil/water): SOIL _____

Lab Sample ID: 266314

Level (low/med): LOW _____

Date Received: 06/27/97

% Solids: 80.6

Concentration Units (ug/L or mg/kg dry weight): MG/KG

| CAS No. | Analyte | Concentration | C | Q | M |
|-----------|-----------|---------------|---|---|----|
| 7429-90-5 | Aluminum | | | | NR |
| 7440-36-0 | Antimony | | | | NR |
| 7440-38-2 | Arsenic | | | | NR |
| 7440-39-3 | Barium | | | | NR |
| 7440-41-7 | Beryllium | | | | NR |
| 7440-43-9 | Cadmium | 0.15 | U | | P |
| 7440-70-2 | Calcium | | | | NR |
| 7440-47-3 | Chromium | | | | NR |
| 7440-48-4 | Cobalt | | | | NR |
| 7440-50-8 | Copper | | | | NR |
| 7439-89-6 | Iron | | | | NR |
| 7439-92-1 | Lead | 31.0 | | | P |
| 7439-95-4 | Magnesium | | | | NR |
| 7439-96-5 | Manganese | | | | NR |
| 7439-97-6 | Mercury | | | | NR |
| 7440-02-0 | Nickel | | | | NR |
| 7440-09-7 | Potassium | | | | NR |
| 7782-49-2 | Selenium | | | | NR |
| 7440-22-4 | Silver | | | | NR |
| 7440-23-5 | Sodium | | | | NR |
| 7440-28-0 | Thallium | | | | NR |
| 7440-62-2 | Vanadium | | | | NR |
| 7440-66-6 | Zinc | | | | NR |
| | Cyanide | | | | NR |

Color Before: BROWN _____

Clarity Before: OPAQUE

Texture: MED _____

Color After: YELLOW _____

Clarity After: CLEAR _____

Artifacts: _____

Comments:

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

CDE05

Lab Name: ICM LABS _____

Contract: _____

Lab Code: ICM _____

Case No.: _____

SAS No.: _____

SDG No.: CDE01

Matrix (soil/water): SOIL _____

Lab Sample ID: 266315

Level (low/med): LOW _____

Date Received: 06/27/97

% Solids: 88.7

Concentration Units (ug/L or mg/kg dry weight): MG/KG

| CAS No. | Analyte | Concentration | C | Q | M |
|-----------|-----------|---------------|---|---|----|
| 7429-90-5 | Aluminum | | | | NR |
| 7440-36-0 | Antimony | | | | NR |
| 7440-38-2 | Arsenic | | | | NR |
| 7440-39-3 | Barium | | | | NR |
| 7440-41-7 | Beryllium | | | | NR |
| 7440-43-9 | Cadmium | 0.44 | B | | P |
| 7440-70-2 | Calcium | | | | NR |
| 7440-47-3 | Chromium | | | | NR |
| 7440-48-4 | Cobalt | | | | NR |
| 7440-50-8 | Copper | | | | NR |
| 7439-89-6 | Iron | | | | NR |
| 7439-92-1 | Lead | 105 | | | P |
| 7439-95-4 | Magnesium | | | | NR |
| 7439-96-5 | Manganese | | | | NR |
| 7439-97-6 | Mercury | | | | NR |
| 7440-02-0 | Nickel | | | | NR |
| 7440-09-7 | Potassium | | | | NR |
| 7782-49-2 | Selenium | | | | NR |
| 7440-22-4 | Silver | | | | NR |
| 7440-23-5 | Sodium | | | | NR |
| 7440-28-0 | Thallium | | | | NR |
| 7440-62-2 | Vanadium | | | | NR |
| 7440-66-6 | Zinc | | | | NR |
| | Cyanide | | | | NR |

Color Before: BROWN _____

Clarity Before: OPAQUE

Texture: MED _____

Color After: YELLOW _____

Clarity After: CLEAR _____

Artifacts: _____

Comments:

INORGANIC ANALYSES DATA SHEET

CDE06

Lab Name: ICM LABS _____ Contract: _____

Lab Code: ICM _____ Case No.: _____ SAS No.: _____ SDG No.: CDE01

Matrix (soil/water): SOIL _____ Lab Sample ID: 266316

Level (low/med): LOW _____ Date Received: 06/27/97

% Solids: 89.9

Concentration Units (ug/L or mg/kg dry weight): MG/KG

| CAS No. | Analyte | Concentration | C | Q | M |
|-----------|-----------|---------------|---|---|----|
| 7429-90-5 | Aluminum | | | | NR |
| 7440-36-0 | Antimony | | | | NR |
| 7440-38-2 | Arsenic | | | | NR |
| 7440-39-3 | Barium | | | | NR |
| 7440-41-7 | Beryllium | | | | NR |
| 7440-43-9 | Cadmium | 0.13 | U | | P |
| 7440-70-2 | Calcium | | | | NR |
| 7440-47-3 | Chromium | | | | NR |
| 7440-48-4 | Cobalt | | | | NR |
| 7440-50-8 | Copper | | | | NR |
| 7439-89-6 | Iron | | | | NR |
| 7439-92-1 | Lead | 78.0 | | | P |
| 7439-95-4 | Magnesium | | | | NR |
| 7439-96-5 | Manganese | | | | NR |
| 7439-97-6 | Mercury | | | | NR |
| 7440-02-0 | Nickel | | | | NR |
| 7440-09-7 | Potassium | | | | NR |
| 7782-49-2 | Selenium | | | | NR |
| 7440-22-4 | Silver | | | | NR |
| 7440-23-5 | Sodium | | | | NR |
| 7440-28-0 | Thallium | | | | NR |
| 7440-62-2 | Vanadium | | | | NR |
| 7440-66-6 | Zinc | | | | NR |
| | Cyanide | | | | NR |

Color Before: BROWN _____ Clarity Before: OPAQUE Texture: MED _____

Color After: YELLOW _____ Clarity After: CLEAR Artifacts: _____

Comments:

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

CDE07

Lab Name: ICM LABS _____

Contract: _____

Lab Code: ICM _____

Case No.: _____

SAS No.: _____

SDG No.: CDE01

Matrix (soil/water): SOIL _____

Lab Sample ID: 266317

Level (low/med): LOW _____

Date Received: 06/27/97

% Solids: 86.7

Concentration Units (ug/L or mg/kg dry weight): MG/KG

| CAS No. | Analyte | Concentration | C | Q | M |
|-----------|-----------|---------------|---|---|----|
| 7429-90-5 | Aluminum | | | | NR |
| 7440-36-0 | Antimony | | | | NR |
| 7440-38-2 | Arsenic | | | | NR |
| 7440-39-3 | Barium | | | | NR |
| 7440-41-7 | Beryllium | | | | NR |
| 7440-43-9 | Cadmium | 0.14 | U | | P |
| 7440-70-2 | Calcium | | | | NR |
| 7440-47-3 | Chromium | | | | NR |
| 7440-48-4 | Cobalt | | | | NR |
| 7440-50-8 | Copper | | | | NR |
| 7439-89-6 | Iron | | | | NR |
| 7439-92-1 | Lead | 73.4 | | | P |
| 7439-95-4 | Magnesium | | | | NR |
| 7439-96-5 | Manganese | | | | NR |
| 7439-97-6 | Mercury | | | | NR |
| 7440-02-0 | Nickel | | | | NR |
| 7440-09-7 | Potassium | | | | NR |
| 7782-49-2 | Selenium | | | | NR |
| 7440-22-4 | Silver | | | | NR |
| 7440-23-5 | Sodium | | | | NR |
| 7440-28-0 | Thallium | | | | NR |
| 7440-62-2 | Vanadium | | | | NR |
| 7440-66-6 | Zinc | | | | NR |
| | Cyanide | | | | NR |

Color Before: BROWN _____ Clarity Before: OPAQUE Texture: MED _____

Color After: YELLOW _____ Clarity After: CLEAR Artifacts: _____

Comments:

1
INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

CDE08

Lab Name: ICM LABS _____

Contract: _____

Lab Code: ICM _____

Case No.: _____

SAS No.: _____

SDG No.: CDE01

Matrix (soil/water): SOIL _____

Lab Sample ID: 266318

Level (low/med): LOW _____

Date Received: 06/27/97

% Solids: 85.6

Concentration Units (ug/L or mg/kg dry weight): MG/KG

| CAS No. | Analyte | Concentration | C | Q | M |
|-----------|-----------|---------------|---|---|----|
| 7429-90-5 | Aluminum | | | | NR |
| 7440-36-0 | Antimony | | | | NR |
| 7440-38-2 | Arsenic | | | | NR |
| 7440-39-3 | Barium | | | | NR |
| 7440-41-7 | Beryllium | | | | NR |
| 7440-43-9 | Cadmium | 0.14 | U | | P |
| 7440-70-2 | Calcium | | | | NR |
| 7440-47-3 | Chromium | | | | NR |
| 7440-48-4 | Cobalt | | | | NR |
| 7440-50-8 | Copper | | | | NR |
| 7439-89-6 | Iron | | | | NR |
| 7439-92-1 | Lead | 56.5 | | | P |
| 7439-95-4 | Magnesium | | | | NR |
| 7439-96-5 | Manganese | | | | NR |
| 7439-97-6 | Mercury | | | | NR |
| 7440-02-0 | Nickel | | | | NR |
| 7440-09-7 | Potassium | | | | NR |
| 7782-49-2 | Selenium | | | | NR |
| 7440-22-4 | Silver | | | | NR |
| 7440-23-5 | Sodium | | | | NR |
| 7440-28-0 | Thallium | | | | NR |
| 7440-62-2 | Vanadium | | | | NR |
| 7440-66-6 | Zinc | | | | NR |
| | Cyanide | | | | NR |

Color Before: BROWN _____

Clarity Before: OPAQUE

Texture: MED _____

Color After: YELLOW _____

Clarity After: CLEAR _____

Artifacts: _____

Comments:

INORGANIC ANALYSES DATA SHEET

CDE09

Lab Name: ICM_LABS _____

Contract: _____

Lab Code: ICM _____

Case No.: _____

SAS No.: _____

SDG No.: CDE01 _____

Matrix (soil/water): SOIL _____

Lab Sample ID: 266319

Level (low/med): LOW _____

Date Received: 06/27/97

% Solids: 87.9

Concentration Units (ug/L or mg/kg dry weight): MG/KG

| CAS No. | Analyte | Concentration | C | Q | M |
|-----------|-----------|---------------|---|---|----|
| 7429-90-5 | Aluminum | | | | NR |
| 7440-36-0 | Antimony | | | | NR |
| 7440-38-2 | Arsenic | | | | NR |
| 7440-39-3 | Barium | | | | NR |
| 7440-41-7 | Beryllium | | | | NR |
| 7440-43-9 | Cadmium | 0.47 | B | | P |
| 7440-70-2 | Calcium | | | | NR |
| 7440-47-3 | Chromium | | | | NR |
| 7440-48-4 | Cobalt | | | | NR |
| 7440-50-8 | Copper | | | | NR |
| 7439-89-6 | Iron | | | | NR |
| 7439-92-1 | Lead | 69.6 | | | P |
| 7439-95-4 | Magnesium | | | | NR |
| 7439-96-5 | Manganese | | | | NR |
| 7439-97-6 | Mercury | | | | NR |
| 7440-02-0 | Nickel | | | | NR |
| 7440-09-7 | Potassium | | | | NR |
| 7782-49-2 | Selenium | | | | NR |
| 7440-22-4 | Silver | | | | NR |
| 7440-23-5 | Sodium | | | | NR |
| 7440-28-0 | Thallium | | | | NR |
| 7440-62-2 | Vanadium | | | | NR |
| 7440-66-6 | Zinc | | | | NR |
| | Cyanide | | | | NR |

Color Before: BROWN _____

Clarity Before: OPAQUE

Texture: MED _____

Color After: YELLOW _____

Clarity After: CLEAR _____

Artifacts: _____

Comments:

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

CDE10

Lab Name: ICM_LABS _____

Contract: _____

Lab Code: ICM _____

Case No.: _____

SAS No.: _____

SDG No.: CDE01 _____

Matrix (soil/water): SOIL _____

Lab Sample ID: 266320

Level (low/med): LOW _____

Date Received: 06/27/97

% Solids: 94.1

Concentration Units (ug/L or mg/kg dry weight): MG/KG

| CAS No. | Analyte | Concentration | C | Q | M |
|-----------|-----------|---------------|---|---|----|
| 7429-90-5 | Aluminum | | | | NR |
| 7440-36-0 | Antimony | | | | NR |
| 7440-38-2 | Arsenic | | | | NR |
| 7440-39-3 | Barium | | | | NR |
| 7440-41-7 | Beryllium | | | | NR |
| 7440-43-9 | Cadmium | 0.13 | U | | P |
| 7440-70-2 | Calcium | | | | NR |
| 7440-47-3 | Chromium | | | | NR |
| 7440-48-4 | Cobalt | | | | NR |
| 7440-50-8 | Copper | | | | NR |
| 7439-89-6 | Iron | | | | NR |
| 7439-92-1 | Lead | 50.3 | | | P |
| 7439-95-4 | Magnesium | | | | NR |
| 7439-96-5 | Manganese | | | | NR |
| 7439-97-6 | Mercury | | | | NR |
| 7440-02-0 | Nickel | | | | NR |
| 7440-09-7 | Potassium | | | | NR |
| 7782-49-2 | Selenium | | | | NR |
| 7440-22-4 | Silver | | | | NR |
| 7440-23-5 | Sodium | | | | NR |
| 7440-28-0 | Thallium | | | | NR |
| 7440-62-2 | Vanadium | | | | NR |
| 7440-66-6 | Zinc | | | | NR |
| | Cyanide | | | | NR |

Color Before: BROWN _____

Clarity Before: OPAQUE

Texture: MED _____

Color After: YELLOW _____

Clarity After: CLEAR _____

Artifacts: _____

Comments:

1

EPA SAMPLE NO.

INORGANIC ANALYSES DATA SHEET

CDE11

Lab Name: ICM LABS _____ Contract: _____

Lab Code: ICM _____ Case No.: _____ SAS No.: _____ SDG No.: CDE01 _____

Matrix (soil/water): SOIL _____ Lab Sample ID: 266321

Level (low/med): LOW _____ Date Received: 06/27/97

% Solids: 85.6

Concentration Units (ug/L or mg/kg dry weight): MG/KG

| CAS No. | Analyte | Concentration | C | Q | M |
|-----------|-----------|---------------|---|---|----|
| 7429-90-5 | Aluminum | | | | NR |
| 7440-36-0 | Antimony | | | | NR |
| 7440-38-2 | Arsenic | | | | NR |
| 7440-39-3 | Barium | | | | NR |
| 7440-41-7 | Beryllium | | | | NR |
| 7440-43-9 | Cadmium | 0.27 | B | | P |
| 7440-70-2 | Calcium | | | | NR |
| 7440-47-3 | Chromium | | | | NR |
| 7440-48-4 | Cobalt | | | | NR |
| 7440-50-8 | Copper | | | | NR |
| 7439-89-6 | Iron | | | | NR |
| 7439-92-1 | Lead | 117 | | | P |
| 7439-95-4 | Magnesium | | | | NR |
| 7439-96-5 | Manganese | | | | NR |
| 7439-97-6 | Mercury | | | | NR |
| 7440-02-0 | Nickel | | | | NR |
| 7440-09-7 | Potassium | | | | NR |
| 7782-49-2 | Selenium | | | | NR |
| 7440-22-4 | Silver | | | | NR |
| 7440-23-5 | Sodium | | | | NR |
| 7440-28-0 | Thallium | | | | NR |
| 7440-62-2 | Vanadium | | | | NR |
| 7440-66-6 | Zinc | | | | NR |
| | Cyanide | | | | NR |

Color Before: BROWN _____ Clarity Before: OPAQUE Texture: MED _____

Color After: YELLOW _____ Clarity After: CLEAR _____ Artifacts: _____

Comments:

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

CDE12

Lab Name: ICM_LABS

Contract: _____

Lab Code: ICM

Case No.: _____

SAS No.: _____

SDG No.: CDE01

Matrix (soil/water): SOIL

Lab Sample ID: 266322

Level (low/med): LOW

Date Received: 06/27/97

% Solids: 92.5

Concentration Units (ug/L or mg/kg dry weight): MG/KG

| CAS No. | Analyte | Concentration | C | Q | M |
|-----------|-----------|---------------|---|---|----|
| 7429-90-5 | Aluminum | | - | | NR |
| 7440-36-0 | Antimony | | - | | NR |
| 7440-38-2 | Arsenic | | - | | NR |
| 7440-39-3 | Barium | | - | | NR |
| 7440-41-7 | Beryllium | | - | | NR |
| 7440-43-9 | Cadmium | 0.63 | B | | P |
| 7440-70-2 | Calcium | | - | | NR |
| 7440-47-3 | Chromium | | - | | NR |
| 7440-48-4 | Cobalt | | - | | NR |
| 7440-50-8 | Copper | | - | | NR |
| 7439-89-6 | Iron | | - | | NR |
| 7439-92-1 | Lead | 183 | | | P |
| 7439-95-4 | Magnesium | | - | | NR |
| 7439-96-5 | Manganese | | - | | NR |
| 7439-97-6 | Mercury | | - | | NR |
| 7440-02-0 | Nickel | | - | | NR |
| 7440-09-7 | Potassium | | - | | NR |
| 7782-49-2 | Selenium | | - | | NR |
| 7440-22-4 | Silver | | - | | NR |
| 7440-23-5 | Sodium | | - | | NR |
| 7440-28-0 | Thallium | | - | | NR |
| 7440-62-2 | Vanadium | | - | | NR |
| 7440-66-6 | Zinc | | - | | NR |
| | Cyanide | | - | | NR |

Color Before: BROWN

Clarity Before: OPAQUE

Texture: MED

Color After: YELLOW

Clarity After: CLEAR

Artifacts: _____

Comments:

1
INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

CDE13

Lab Name: ICM_LABS _____

Contract: _____

Lab Code: ICM _____

Case No.: _____

SAS No.: _____

SDG No.: CDE01 _____

Matrix (soil/water): SOIL _____

Lab Sample ID: 266323

Level (low/med): LOW _____

Date Received: 06/27/97

% Solids: 87.1

Concentration Units (ug/L or mg/kg dry weight): MG/KG

| CAS No. | Analyte | Concentration | C | Q | M |
|-----------|-----------|---------------|---|---|----|
| 7429-90-5 | Aluminum | | | | NR |
| 7440-36-0 | Antimony | | | | NR |
| 7440-38-2 | Arsenic | | | | NR |
| 7440-39-3 | Barium | | | | NR |
| 7440-41-7 | Beryllium | | | | NR |
| 7440-43-9 | Cadmium | 1.4 | | | P |
| 7440-70-2 | Calcium | | | | NR |
| 7440-47-3 | Chromium | | | | NR |
| 7440-48-4 | Cobalt | | | | NR |
| 7440-50-8 | Copper | | | | NR |
| 7439-89-6 | Iron | | | | NR |
| 7439-92-1 | Lead | 247 | | | P |
| 7439-95-4 | Magnesium | | | | NR |
| 7439-96-5 | Manganese | | | | NR |
| 7439-97-6 | Mercury | | | | NR |
| 7440-02-0 | Nickel | | | | NR |
| 7440-09-7 | Potassium | | | | NR |
| 7782-49-2 | Selenium | | | | NR |
| 7440-22-4 | Silver | | | | NR |
| 7440-23-5 | Sodium | | | | NR |
| 7440-28-0 | Thallium | | | | NR |
| 7440-62-2 | Vanadium | | | | NR |
| 7440-66-6 | Zinc | | | | NR |
| | Cyanide | | | | NR |

Color Before: BROWN _____

Clarity Before: OPAQUE

Texture: MED _____

Color After: YELLOW _____

Clarity After: CLEAR _____

Artifacts: _____

Comments:

1
INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

CDE14

Lab Name: ICM LABS _____

Contract: _____

Lab Code: ICM _____

Case No.: _____

SAS No.: _____

SDG No.: CDE01 _____

Matrix (soil/water): SOIL _____

Lab Sample ID: 266324

Level (low/med): LOW _____

Date Received: 06/27/97

% Solids: 79.6

Concentration Units (ug/L or mg/kg dry weight): MG/KG

| CAS No. | Analyte | Concentration | C | Q | M |
|-----------|-----------|---------------|---|---|----|
| 7429-90-5 | Aluminum | | | | NR |
| 7440-36-0 | Antimony | | | | NR |
| 7440-38-2 | Arsenic | | | | NR |
| 7440-39-3 | Barium | | | | NR |
| 7440-41-7 | Beryllium | | | | NR |
| 7440-43-9 | Cadmium | 2.3 | | | P |
| 7440-70-2 | Calcium | | | | NR |
| 7440-47-3 | Chromium | | | | NR |
| 7440-48-4 | Cobalt | | | | NR |
| 7440-50-8 | Copper | | | | NR |
| 7439-89-6 | Iron | | | | NR |
| 7439-92-1 | Lead | 291 | | | P |
| 7439-95-4 | Magnesium | | | | NR |
| 7439-96-5 | Manganese | | | | NR |
| 7439-97-6 | Mercury | | | | NR |
| 7440-02-0 | Nickel | | | | NR |
| 7440-09-7 | Potassium | | | | NR |
| 7782-49-2 | Selenium | | | | NR |
| 7440-22-4 | Silver | | | | NR |
| 7440-23-5 | Sodium | | | | NR |
| 7440-28-0 | Thallium | | | | NR |
| 7440-62-2 | Vanadium | | | | NR |
| 7440-66-6 | Zinc | | | | NR |
| | Cyanide | | | | NR |

Color Before: BROWN _____

Clarity Before: OPAQUE

Texture: MED _____

Color After: YELLOW _____

Clarity After: CLEAR _____

Artifacts: _____

Comments:

1
INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

CDE15

Lab Name: ICM LABS _____

Contract: _____

Lab Code: ICM _____

Case No.: _____

SAS No.: _____

SDG No.: CDE01 _____

Matrix (soil/water): SOIL _____

Lab Sample ID: 266325

Level (low/med): LOW _____

Date Received: 06/27/97

% Solids: 91.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

| CAS No. | Analyte | Concentration | C | Q | M |
|-----------|-----------|---------------|---|---|----|
| 7429-90-5 | Aluminum | | | | NR |
| 7440-36-0 | Antimony | | | | NR |
| 7440-38-2 | Arsenic | | | | NR |
| 7440-39-3 | Barium | | | | NR |
| 7440-41-7 | Beryllium | | | | NR |
| 7440-43-9 | Cadmium | 1.8 | | | P |
| 7440-70-2 | Calcium | | | | NR |
| 7440-47-3 | Chromium | | | | NR |
| 7440-48-4 | Cobalt | | | | NR |
| 7440-50-8 | Copper | | | | NR |
| 7439-89-6 | Iron | | | | NR |
| 7439-92-1 | Lead | 221 | | | P |
| 7439-95-4 | Magnesium | | | | NR |
| 7439-96-5 | Manganese | | | | NR |
| 7439-97-6 | Mercury | | | | NR |
| 7440-02-0 | Nickel | | | | NR |
| 7440-09-7 | Potassium | | | | NR |
| 7782-49-2 | Selenium | | | | NR |
| 7440-22-4 | Silver | | | | NR |
| 7440-23-5 | Sodium | | | | NR |
| 7440-28-0 | Thallium | | | | NR |
| 7440-62-2 | Vanadium | | | | NR |
| 7440-66-6 | Zinc | | | | NR |
| | Cyanide | | | | NR |

Color Before: BROWN _____

Clarity Before: OPAQUE

Texture: MED _____

Color After: YELLOW _____

Clarity After: CLEAR _____

Artifacts: _____

Comments:

INORGANIC ANALYSES DATA SHEET

CDE16

Lab Name: ICM LABS _____

Contract: _____

Lab Code: ICM _____

Case No.: _____

SAS No.: _____

SDG No.: CDE01 _____

Matrix (soil/water): SOIL _____

Lab Sample ID: 266326

Level (low/med): LOW _____

Date Received: 06/27/97

% Solids: 90.9

Concentration Units (ug/L or mg/kg dry weight): MG/KG

| CAS No. | Analyte | Concentration | C | Q | M |
|-----------|-----------|---------------|---|---|----|
| 7429-90-5 | Aluminum | | | | NR |
| 7440-36-0 | Antimony | | | | NR |
| 7440-38-2 | Arsenic | | | | NR |
| 7440-39-3 | Barium | | | | NR |
| 7440-41-7 | Beryllium | | | | NR |
| 7440-43-9 | Cadmium | 0.26 | B | | P |
| 7440-70-2 | Calcium | | | | NR |
| 7440-47-3 | Chromium | | | | NR |
| 7440-48-4 | Cobalt | | | | NR |
| 7440-50-8 | Copper | | | | NR |
| 7439-89-6 | Iron | | | | NR |
| 7439-92-1 | Lead | 40.7 | | | P |
| 7439-95-4 | Magnesium | | | | NR |
| 7439-96-5 | Manganese | | | | NR |
| 7439-97-6 | Mercury | | | | NR |
| 7440-02-0 | Nickel | | | | NR |
| 7440-09-7 | Potassium | | | | NR |
| 7782-49-2 | Selenium | | | | NR |
| 7440-22-4 | Silver | | | | NR |
| 7440-23-5 | Sodium | | | | NR |
| 7440-28-0 | Thallium | | | | NR |
| 7440-62-2 | Vanadium | | | | NR |
| 7440-66-6 | Zinc | | | | NR |
| | Cyanide | | | | NR |

Color Before: BROWN _____ Clarity Before: OPAQUE Texture: MED _____

Color After: YELLOW _____ Clarity After: CLEAR Artifacts: _____

Comments:

EPA SAMPLE NO.

1

INORGANIC ANALYSES DATA SHEET

CDE17

Lab Name: ICM LABS

Contract: _____

Lab Code: ICM

Case No.: _____

SAS No.: _____

SDG No.: CDE01

Matrix (soil/water): SOIL

Lab Sample ID: 266327

Level (low/med): LOW

Date Received: 06/27/97

% Solids: 95.2

Concentration Units (ug/L or mg/kg dry weight): MG/KG

| CAS No. | Analyte | Concentration | C | Q | M |
|-----------|-----------|---------------|---|---|----|
| 7429-90-5 | Aluminum | | | | NR |
| 7440-36-0 | Antimony | | | | NR |
| 7440-38-2 | Arsenic | | | | NR |
| 7440-39-3 | Barium | | | | NR |
| 7440-41-7 | Beryllium | | | | NR |
| 7440-43-9 | Cadmium | 0.12 | U | | P |
| 7440-70-2 | Calcium | | | | NR |
| 7440-47-3 | Chromium | | | | NR |
| 7440-48-4 | Cobalt | | | | NR |
| 7440-50-8 | Copper | | | | NR |
| 7439-89-6 | Iron | | | | NR |
| 7439-92-1 | Lead | 68.9 | | | P |
| 7439-95-4 | Magnesium | | | | NR |
| 7439-96-5 | Manganese | | | | NR |
| 7439-97-6 | Mercury | | | | NR |
| 7440-02-0 | Nickel | | | | NR |
| 7440-09-7 | Potassium | | | | NR |
| 7782-49-2 | Selenium | | | | NR |
| 7440-22-4 | Silver | | | | NR |
| 7440-23-5 | Sodium | | | | NR |
| 7440-28-0 | Thallium | | | | NR |
| 7440-62-2 | Vanadium | | | | NR |
| 7440-66-6 | Zinc | | | | NR |
| | Cyanide | | | | NR |

Color Before: BROWN

Clarity Before: OPAQUE

Texture: MED

Color After: YELLOW

Clarity After: CLEAR

Artifacts: _____

Comments:

INORGANIC ANALYSES DATA SHEET

CDE18

Lab Name: ICM_LABS

Contract: _____

Lab Code: ICM

Case No.: _____

SAS No.: _____

SDG No.: CDE01

Matrix (soil/water): SOIL

Lab Sample ID: 266328

Level (low/med): LOW

Date Received: 06/27/97

% Solids: 92.1

Concentration Units (ug/L or mg/kg dry weight): MG/KG

| CAS No. | Analyte | Concentration | C | Q | M |
|-----------|-----------|---------------|---|---|----|
| 7429-90-5 | Aluminum | | | | NR |
| 7440-36-0 | Antimony | | | | NR |
| 7440-38-2 | Arsenic | | | | NR |
| 7440-39-3 | Barium | | | | NR |
| 7440-41-7 | Beryllium | | | | NR |
| 7440-43-9 | Cadmium | 0.13 | U | | P |
| 7440-70-2 | Calcium | | | | NR |
| 7440-47-3 | Chromium | | | | NR |
| 7440-48-4 | Cobalt | | | | NR |
| 7440-50-8 | Copper | | | | NR |
| 7439-89-6 | Iron | | | | NR |
| 7439-92-1 | Lead | 78.2 | | | P |
| 7439-95-4 | Magnesium | | | | NR |
| 7439-96-5 | Manganese | | | | NR |
| 7439-97-6 | Mercury | | | | NR |
| 7440-02-0 | Nickel | | | | NR |
| 7440-09-7 | Potassium | | | | NR |
| 7782-49-2 | Selenium | | | | NR |
| 7440-22-4 | Silver | | | | NR |
| 7440-23-5 | Sodium | | | | NR |
| 7440-28-0 | Thallium | | | | NR |
| 7440-62-2 | Vanadium | | | | NR |
| 7440-66-6 | Zinc | | | | NR |
| | Cyanide | | | | NR |

Color Before: BROWN

Clarity Before: OPAQUE

Texture: MED

Color After: YELLOW

Clarity After: CLEAR

Artifacts: _____

Comments:

INORGANIC ANALYSES DATA SHEET

CDE19

Lab Name: ICM_LABS Contract:

Lab Code: ICM Case No.: SAS No.: SDG No.: CDE01

Matrix (soil/water): SOIL Lab Sample ID: 266329

Level (low/med): LOW Date Received: 06/27/97

% Solids: 95.1

Concentration Units (ug/L or mg/kg dry weight): MG/KG

| CAS No. | Analyte | Concentration | C | Q | M |
|-----------|-----------|---------------|---|---|----|
| 7429-90-5 | Aluminum | | | | NR |
| 7440-36-0 | Antimony | | | | NR |
| 7440-38-2 | Arsenic | | | | NR |
| 7440-39-3 | Barium | | | | NR |
| 7440-41-7 | Beryllium | | | | NR |
| 7440-43-9 | Cadmium | 0.13 | U | | P |
| 7440-70-2 | Calcium | | | | NR |
| 7440-47-3 | Chromium | | | | NR |
| 7440-48-4 | Cobalt | | | | NR |
| 7440-50-8 | Copper | | | | NR |
| 7439-89-6 | Iron | | | | NR |
| 7439-92-1 | Lead | 12.3 | | | P |
| 7439-95-4 | Magnesium | | | | NR |
| 7439-96-5 | Manganese | | | | NR |
| 7439-97-6 | Mercury | | | | NR |
| 7440-02-0 | Nickel | | | | NR |
| 7440-09-7 | Potassium | | | | NR |
| 7782-49-2 | Selenium | | | | NR |
| 7440-22-4 | Silver | | | | NR |
| 7440-23-5 | Sodium | | | | NR |
| 7440-28-0 | Thallium | | | | NR |
| 7440-62-2 | Vanadium | | | | NR |
| 7440-66-6 | Zinc | | | | NR |
| | Cyanide | | | | NR |

Color Before: BROWN Clarity Before: OPAQUE Texture: MED

Color After: YELLOW Clarity After: CLEAR Artifacts:

Comments:

INORGANIC ANALYSES DATA SHEET

CDE20

Lab Name: ICM LABS _____

Contract: _____

Lab Code: ICM _____

Case No.: _____

SAS No.: _____

SDG No.: CDE01 _____

Matrix (soil/water): SOIL _____

Lab Sample ID: 266330

Level (low/med): LOW _____

Date Received: 06/27/97

% Solids: 87.4

Concentration Units (ug/L or mg/kg dry weight): MG/KG

| CAS No. | Analyte | Concentration | C | Q | M |
|-----------|-----------|---------------|---|---|----|
| 7429-90-5 | Aluminum | | | | NR |
| 7440-36-0 | Antimony | | | | NR |
| 7440-38-2 | Arsenic | | | | NR |
| 7440-39-3 | Barium | | | | NR |
| 7440-41-7 | Beryllium | | | | NR |
| 7440-43-9 | Cadmium | 0.14 | U | | P |
| 7440-70-2 | Calcium | | | | NR |
| 7440-47-3 | Chromium | | | | NR |
| 7440-48-4 | Cobalt | | | | NR |
| 7440-50-8 | Copper | | | | NR |
| 7439-89-6 | Iron | | | | NR |
| 7439-92-1 | Lead | 55.6 | | | P |
| 7439-95-4 | Magnesium | | | | NR |
| 7439-96-5 | Manganese | | | | NR |
| 7439-97-6 | Mercury | | | | NR |
| 7440-02-0 | Nickel | | | | NR |
| 7440-09-7 | Potassium | | | | NR |
| 7782-49-2 | Selenium | | | | NR |
| 7440-22-4 | Silver | | | | NR |
| 7440-23-5 | Sodium | | | | NR |
| 7440-28-0 | Thallium | | | | NR |
| 7440-62-2 | Vanadium | | | | NR |
| 7440-66-6 | Zinc | | | | NR |
| | Cyanide | | | | NR |

Color Before: BROWN _____

Clarity Before: OPAQUE

Texture: MED _____

Color After: YELLOW _____

Clarity After: CLEAR _____

Artifacts: _____

Comments:

INORGANIC ANALYSES DATA SHEET

CDE21

Lab Name: ICM_LABS

Contract: _____

Lab Code: ICM

Case No.: _____

SAS No.: _____

SDG No.: CDE01

Matrix (soil/water): SOIL

Lab Sample ID: 266331

Level (low/med): LOW

Date Received: 06/27/97

Solids: 91.1

Concentration Units (ug/L or mg/kg dry weight): MG/KG

| CAS No. | Analyte | Concentration | C | Q | M |
|-----------|-----------|---------------|---|---|----|
| 7429-90-5 | Aluminum | | | | NR |
| 7440-36-0 | Antimony | | | | NR |
| 7440-38-2 | Arsenic | | | | NR |
| 7440-39-3 | Barium | | | | NR |
| 7440-41-7 | Beryllium | | | | NR |
| 7440-43-9 | Cadmium | 0.81 | B | | P |
| 7440-70-2 | Calcium | | | | NR |
| 7440-47-3 | Chromium | | | | NR |
| 7440-48-4 | Cobalt | | | | NR |
| 7440-50-8 | Copper | | | | NR |
| 7439-89-6 | Iron | | | | NR |
| 7439-92-1 | Lead | 126 | | | P |
| 7439-95-4 | Magnesium | | | | NR |
| 7439-96-5 | Manganese | | | | NR |
| 7439-97-6 | Mercury | | | | NR |
| 7440-02-0 | Nickel | | | | NR |
| 7440-09-7 | Potassium | | | | NR |
| 7782-49-2 | Selenium | | | | NR |
| 7440-22-4 | Silver | | | | NR |
| 7440-23-5 | Sodium | | | | NR |
| 7440-28-0 | Thallium | | | | NR |
| 7440-62-2 | Vanadium | | | | NR |
| 7440-66-6 | Zinc | | | | NR |
| | Cyanide | | | | NR |

Color Before: BROWN

Clarity Before: OPAQUE

Texture: MED

Color After: YELLOW

Clarity After: CLEAR

Artifacts: _____

Comments:

DATA REPORTING QUALIFIERS--INORGANIC

For reporting results, the following "Results Qualifiers" are used:

- B - If the reported value was obtained from a reading that was less than the Contract Required Detection Limit (CRDL), but greater than or equal to the Instrument Detection Limit (IDL).
- U - If the analyte was analyzed for, but not detected.
- E - The reported value is estimated because of the presence of interference.
- M - Duplicate injection precision not met.
- N - Spiked sample recovery not within control limits.
- S - The reported value was determined by the Method of Standard Additions (MSA).
- W - Post-digestion spike for Furnace AA analysis is out of control limits (85-115%), while sample absorbance is less than 50% of spike absorbance.
- * - Duplicate analysis not within control limits.
- + - Correlation coefficient for the MSA is less than 0.995.

*** Entering "S", "W", or "+" is mutually exclusive. No combination of these qualifiers can appear in the same field for an analyte.

M (Method) qualifier

- "P" for ICP
- "A" for Flame AA
- "F" for Furnace AA
- "PM" for ICP when Microwave Digestion is used
- "AM" for flame AA when Microwave Digestion used
- "FM" for Furnace AA when Microwave Digestion used
- "CV" for Manual Cold Vapor AA
- "AV" for automated Cold Vapor AA
- "CA" for Midi-Distillation Spectrophotometric
- "AS" for Semi-Automated Spectrophotometric
- "C" for Manual Spectrophotometric
- "T" for Titrimetric
- "NR" if the analyte is not required to be analyzed

000083

CHAIN OF CUSTODY RECORD

970

1623



SUPERFUND TECHNICAL ASSESSMENT AND RESPONSE TEAM
EPA CONTRACT 58-AW3-2019
DUE 06/25/1997 FROM 06/15/1997

- | | |
|--------------------|--------------------|
| 1. Surface Water | 1. HCl |
| 2. Ground Water | 2. HNO3 |
| 3. Leachate | 3. Na2SO4 |
| 4. Rains | 4. H2SO4 |
| 5. Soil/Sediment | 5. Other (Specify) |
| 6. Oil | 6. Ice Only |
| 7. Waste | 7. Not Provided |
| 8. Other (Specify) | 8. See Comments |

Roy F. Weston Inc., USEPA Region II START

Suite 201, 1090 King Georges Post Road, Edison, New Jersey 08817-3705

Analyst: Steve Simbalay, START Analytical Coordinator

| Sample Number | Sample Collected | Date Collected | Time Collected | Location | Type | TEST ANALYSIS | | Comments |
|---------------|------------------|----------------|----------------|----------|------|---------------|----------|--------------|
| | | | | | | TOC | TOC REAC | |
| CDE-001 | 5 | 6/26/97 | 1205 | L | G | 6 | X | TOTAL Pb, Cd |
| CDE-002 | 5 | 6/26/97 | 1205 | L | G | 6 | X | |
| CDE-003 | 5 | 6/26/97 | 1205 | L | G | 6 | X | |
| CDE-004 | 5 | 6/26/97 | 1226 | L | G | 6 | X | |
| CDE-005 | 5 | 6/26/97 | 1238 | L | G | 6 | X | |
| CDE-005 MS | 5 | 6/26/97 | 1238 | L | G | 6 | X | |
| CDE-005 MSD | 5 | 6/26/97 | 1238 | L | G | 6 | X | |
| CDE-006 | 5 | 6/26/97 | 1256 | L | G | 6 | X | |
| CDE-007 | 5 | 6/26/97 | 1300 | L | G | 6 | X | |
| CDE-008 | 5 | 6/26/97 | 1310 | L | G | 6 | X | |
| CDE-009 | 5 | 6/26/97 | 1322 | L | G | 6 | X | ↓ ↓ ↓ ↓ |

Comments:

Person Assuming Responsibility for Sample:

M. McLeanTime Date (MM/DD/YY)
1130 6/27/97

| Sample Number | Received By: | Time | Date | Received By: | Reason for Change of Custody |
|---------------|------------------|------|---------|-----------------|------------------------------|
| A11 | <u>M. McLean</u> | 1545 | 6/27/97 | <u>J. Hayes</u> | Transferred to Lab |
| Sample Number | Received By: | Time | Date | Received By: | Reason for Change of Custody |
| Sample Number | Received By: | Time | Date | Received By: | Reason for Change of Custody |

Roy F. Weston Inc.

FEDERAL PROGRAMS DIVISION

In Association with Environmental Analysis Inc. P.E. S. E. PRC Environmental

PND
1970

SUPERFUND TECHNICAL ASSESSMENT AND RESPONSE TEAM
EPA CONTRACT #C-75-0019
PO BOX 244116 FAX 504-244116

1. Seawater
2. Ground Water
3. Leachate
4. Rainwater
5. Sea/Sodium
6. Oil Only
7. Water
8. Other (Specify)
- N. Not Present
- See Comments

8/16/23

Roy F. Weston Inc., USEPA Region II START
Suite 201, 1090 King George Fox Road, Edison, New Jersey 08817-3705
Attention: Sam Smithey, START Analytical Coordinator

| Sample Number | Sample Collected | Date Collected | Time | Level | Type | Purity | TEST ANALYSIS | | | Comments |
|---------------|------------------|----------------|------|-------|------|--------|---------------|-------------|-----------|--------------|
| | | | | | | | VOLATILE | PARTICULATE | CORRECTED | |
| CDE-010 | | 6/26/97 | 1330 | 5 | L | G | 6 | X | | Total Pb, Cd |
| CDE-011 | | 6/26/97 | 1337 | 5 | L | G | 6 | X | | |
| CDE-012 | | 6/26/97 | 1402 | 5 | L | G | 6 | X | | |
| CDE-013 | | 6/26/97 | 1444 | 5 | L | G | 6 | X | | |
| CDE-014 | | 6/26/97 | 1430 | 5 | L | G | 6 | X | | |
| CDE-015 | | 6/26/97 | 1440 | 5 | L | G | 6 | X | | |
| CDE-016 | | 6/27/97 | 1020 | 5 | L | G | 6 | X | | |
| CDE-017 | | 6/27/97 | 1007 | 5 | L | G | 6 | X | | |
| CDE-018 | | 6/27/97 | 1040 | 5 | L | G | 6 | X | | |
| CDE-019 | | 6/27/97 | 1055 | 5 | L | G | 6 | X | | |
| CDE-020 | | 6/27/97 | 1110 | 5 | L | G | 6 | X | | |

Comments:

Person Assuming Responsibility for Sample:

M. McHenry/KM

Time Date (MM/DD/YY)
1130 6/27/97

| Sample Number | Requisitioned By: | Time | Date | Received By: | Reason for Change of Control |
|---------------|-------------------|------|---------|------------------|------------------------------|
| All | <i>M. McHenry</i> | 1545 | 6/27/97 | <i>J. Shultz</i> | Transfer to Lab |
| Sample Number | Requisitioned By: | Time | Date | Received By: | Reason for Change of Control |
| Sample Number | Requisitioned By: | Time | Date | Received By: | Reason for Change of Control |

Roy F. Weston Inc.

FEDERAL PROGRAMS DIVISION

In Association with Radian Associates Inc., E.I.S. Science Associates, PRC Environmental,
and GRS Environmental Services Inc.